

REMARKS

The Official Action mailed June 16, 2004, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on August 22, 2003, and October 14, 2003.

Claims 1-18 were pending in the present application prior to the above amendment. Dependent claims 4, 8 and 12 have been canceled, independent claims 1, 5 and 9 have been amended to include the features of claims 4, 8 and 12, respectively, independent claims 1, 5, 9, 13 and 16 have been amended to better recite the features of the present invention and to correct minor grammatical errors, and new claims 19-23 have been added to recite additional protection to which the Applicants are entitled. Accordingly, claims 1-3, 5-7, 9-11 and 13-23 are now pending in the present application, of which claims 1, 5, 9, 13 and 16 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action rejects claims 1-18 under 35 U.S.C. § 112, first paragraph, asserting that the feature "source and drain regions formed on the first electrode and a second electrode" in claims 1, 5, 9, 13 and 16 is not supported in the specification and the drawings. In response, "formed on the first electrode" has been deleted from claims 1, 5, 9, 13 and 16. The Applicants respectfully submit that the specification and drawings fully support the claims, as amended. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 112 are in order and respectfully requested.

The Official Action rejects claims 1-18 as obvious based on U.S. Patent No. 5,998,841 to Suzawa. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Independent claims 1, 5, 9, 13 and 16 recite "wherein the channel region has a plurality of crystals extending approximately in parallel with a carrier flow direction of the channel region." Suzawa does not teach or suggest at least the above-referenced features of the present invention. Also, it is noted that the Official Action is completely silent as to the above-referenced feature.

Since Suzawa does not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

New dependent claims 19-23 have been added to recite additional protection to which the Applicants are entitled. For the reasons stated above, the Applicants respectfully submit that new claims 19-23 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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